REMARKS

Thorough examination and careful review of the application by the Examiner is noted and appreciated.

Claims 1, 3-14 and 16-20 are pending in the application. Claims 1, 3-14 and 16-20 stand rejected.

Claim Rejections Under 35 USC §103

Claims 1, 3, 10, 12, 14 and 16 are rejected under 35 USC §103(a) as being unpatentable over Saito et al '308 in view of Lu et al '786.

The rejection of claims 1, 3, 10, 12, 14 and 16 under 35 USC §103(a) based on Saito et al and Lu et al is respectfully traversed.

While Applicants concede that Lu et al teaches a liquid crystal comprising a multiplicity of multi-domain homeotropically aligned liquid crystal cells, Applicants respectfully submit that there can be no motivation to combine the teachings of Lu et al with Saito et al, since Saito et al does not contain any teaching that multi-domain homeotropically aligned liquid crystal cells are

preferred in their liquid crystal display device. As a matter of fact, Saito et al discloses a liquid crystal display device that is equipped with an optical shield film. The novelty of the Saito et al device is the use of an additional optical shield film, and not the use of a specific liquid crystal material. While Saito et al does not specify any specific liquid crystal material by stating, at col. 7, lines 5-6, "injecting a liquid crystal material from the opening, while setting the atmosphere at a negative pressure ...". Saito discloses at col. 18, lines 66+, "each of the electronic equipment with the liquid crystal display device built therein is capable of offering enhanced display ability of high quality images with visual irregularities greatly suppressed or eliminated because of the fact that its liquid crystal panel cell gap has less variation". Since **Saito et al does not express any desire of a specific type or an improved liquid crystal material for use in his liquid crystal display device, there can be no motivation to combine the teachings of Lu et al with Saito et al**, and thus placing the multi-domain homeotropically aligned liquid crystal cells in the Saito et al's liquid crystal display device.

The Applicants respectfully submit that although the Examiner suggests that the Saito et al reference could readily be modified to include the Lu et al's reference, "the mere fact that the prior art could be so modified and would not have made the modification obvious **unless the prior art suggested the desirability of the modification**". In re Gordon, 733 F2d 900, 902, 221 USPQ 1125, 1127 (Fed.Cir. 1984). The Applicants respectfully submit that **Saito et al does not suggest Lu et al's modification or provide any reason or motivation to make the modification.**

The rejection of claims 1, 3, 10, 12, 14 and 16 under 35 USC §103(a) based on Saito et al and Lu et al is respectfully traversed. A reconsideration for allowance of these claims is respectfully requested of the Examiner.

Claims 4 and 17 are rejected under 35 USC §103(a) as being unpatentable over Saito et al '308 in view of Kim et al '794. It is contended that Kim et al teaches a liquid crystal comprising a multiplicity of elongated recesses 43 formed in a metal layer on the top surface of the lower substrate for forming a fringe field homeotropically aligned liquid crystal cell.

Claim 4 depends on independent claim 1, while claim 17 depends on independent claim 14. The Applicants have clearly shown that the newly amended independent claims 1 and 14 recite the additional limitation of "a multiplicity of multi-domain homeotropically aligned liquid crystal cells", which is not taught or disclosed by either Saito et al or Kim et al.

The rejection of claims 4 and 17 under 35 USC §103(a) based on Saito et al and Kim et al is respectfully traversed. A reconsideration for allowance of these claims is respectfully requested of the Examiner.

Claim 5 is rejected under 35 USC §103(a) as being unpatentable over Saito et al '308 in view of Iwaki et al '432. It is contended that Iwaki et al teaches a liquid crystal with each of the liquid crystal cells having a square configuration with a dimension of each side about 20 μm, or in a range between about 5 μm and about 20 μm for high speed.

The rejection of claim 5 under 35 USC §103(a) based on Saito et al and Iwaki et al is respectfully traversed.

Claim 5 has been amended to depend on the newly amended independent claim 1, which further recites the limitation of a multiplicity of multi-domain homeotropically aligned liquid crystal cells. The Applicants respectfully submit that such is not disclosed or taught by either Saito et al, Iwaki et al, either singularly or in combination thereof.

The rejection of claim 5 under 35 USC §103(a) based on Saito et al and Iwaki et al is respectfully traversed. A reconsideration for allowance of claim 5 is respectfully requested of the Examiner.

Claim 6 is rejected under 35 USC §103(a) as being unpatentable over Saito et al '308 in view of Lu et al '786 and Bischel et al '268. It is contended that Bischel et al teaches a display panel with each of the liquid crystal cells having a square configuration with a distance to an immediately adjacent pixel less than 100 μm.

The rejection of claim 6 under 35 USC §103(a) based on Saito et al, Lu et al and Bischel et al is respectfully traversed.

Claim 6 depends on independent claim 1, which has been amended to further recite the limitation of multi-domain homeotropically aligned liquid crystal cells which is not taught or disclosed by Saito et al, Lu et al, Bischel et al, either singularly or in combination thereof.

The rejection of claim 6 under 35 USC §103(a) based on Saito et al, Lu et al and Bischel et al is respectfully traversed. A reconsideration for allowance of claim 6 is respectfully requested of the Examiner.

Claim 7 is rejected under 35 USC §103(a) as being unpatentable over Saito et al '308 in view of Lu et al '786 and Rosenblatt et al '358. It is contended that Rosenblatt et al teaches a liquid crystal material that fills the sealed cavity being a chiral type liquid crystal for promoting homeotropic alignment of the liquid crystal and exhibiting a uniform homeotropic alignment substantially throughout the cell.

The rejection of claim 7 under 35 USC §103(a) based on Saito et al, Lu et al and Rosenblatt et al is respectfully traversed.

While the Applicants do not dispute the fact that Rosenblatt et al teaches a liquid crystal material that is a chiral-type liquid crystal, the Applicants respectfully submit that Rosenblatt et al does not teach a multi-domain homeotropically aligned liquid crystal cell.

Claim 7 depends on the newly amended independent claim 1, which recites a multiplicity of multi-domain homeotropically aligned liquid crystal cell, which is neither taught or disclosed by Saito et al, Lu et al and Rosenblatt et al, even when combined together.

The rejection of claim 7 under 35 USC §103(a) based on Saito et al, Lu et al and Rosenblatt et al is respectfully traversed. A reconsideration for allowance of claim 7 is respectfully requested of the Examiner.

Claims 8 and 18 are rejected under 35 USC §103(a) as being unpatentable over Saito et al '308 in view of Lu et al '786 and Akimoto et al JP '522. It is contended that Akimoto teaches spacers being formed of silicon oxide for obtaining the tilted apparatus having an excellent display quality.

Claim 8 depends on the newly amended independent claim 1, while claim 18 depends on the newly amended independent claim 14. Both claims 1 and 14 recites a liquid crystal material that is a multiplicity of multi-domain homeotropically aligned liquid crystal cell, which is neither taught or disclosed by Saito et al, Lu et al, Akimoto et al, either singularly or in combination thereof.

The rejection of claims 8 and 18 under 35 USC §103(a) based on Saito et al and Akimoto et al is respectfully traversed. A reconsideration for allowance of these claims is respectfully requested of the Examiner.

Claims 9, 11 and 19-20 are rejected under 35 USC §103(a) as being unpatentable over Saito et al '308 and Lu et al '786. It is contended that while Saito et al fails to disclose a reflective metal layer formed by a metal selected from the group consisting of Al, Ag and Al-Nd, the Examiner contended that it is well known in the art that reflective metal layers are made of aluminum for low cost and easy manufacturing.

The rejection of claims 9, 11 and 19-20 under 35 USC §103(a) based on Saito et al and Lu et al is respectfully traversed.

Claims 9 and 11 depend on independent claim 1, while claims 19-20 depend on independent claim 14. The Applicants have clearly shown that the newly amended independent claims 1 and 14 are not rendered obvious by Saito et al and Lu et al, since Saito et al and Lu et al do not teach or disclose a multiplicity of multi-domain homeotropically aligned liquid crystal cells.

The rejection of claims 9, 11 and 19-20 under 35 USC §103(a) based on Saito et al and Lu et al is respectfully traversed. A reconsideration for allowance of these claims is respectfully requested of the Examiner.

Claim 13 is rejected under 35 USC §103(a) as being unpatentable over Saito et al '308 in view of Lu et al '786 and Nishio et al et al '547. It is contended that Nishio et al teaches a liquid crystal display with each of said third multiplicity of

silicon light valves having a height between about 0.3 μm and about 3 μm for eliminating irregularities caused by the TFT and treatment of flattening.

The rejection of claim 13 under 35 USC §103(a) based on Saito et al, Lu et al and Nishio et al is respectfully traversed.

Claim 13 depends on the newly amended independent claim 1, which now further recites the limitation of a multiplicity of multi-domain homeotropically aligned liquid crystal cells. The Applicants respectfully submit that neither Saito et al, Lu et al or Nishio et al teach or disclose such limitation, either singularly or in combination thereof.

The rejection of claim 13 under 35 USC §103(a) based on Saito et al and Nishio et al is respectfully traversed. A reconsideration for allowance of claim 13 is respectfully requested of the Examiner.

In the Response to Arguments section of the 01/15/2004 Office Action, the Examiner stated "besides, Saito also disclose **any domains** that can occur at such part are invisible, which in

turn ensures that the display characteristics are free from any possible degradation (col. 15, lines 63-65). Thus, Saito implies the multi-domains can be used for increasing display characteristics."

The Applicants respectfully traverse such arguments as showing any desirability for combining Lu et al with Saito et al. The mere fact that Saito stated "any domains that can occur at such part are invisible" cannot be equated to a statement of showing the desirability of using a specific domain, i.e. the multi-domain homeotropically aligned liquid crystal cells, as in the present invention. As a matter of fact, the statement of "any domains" of Saito et al teaches away from the present invention.

Based on the foregoing, the Applicants respectfully submit that all of the pending claims, i.e. claims 1, 3-14 and 16-20, are now in condition for allowance. Such favorable action by the Examiner at an early date is respectfully solicited.

In the event that the present invention is not in a condition for allowance for any other reasons, the Examiner is respectfully invited to call the Applicants' representative at his Bloomfield Hills, Michigan office at (248) 540-4040 such that necessary action may be taken to place the application in a condition for allowance.

Respectfully submitted,

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